

REMARKS

Claims 1-41 are currently pending. In response to the Notice of Appeal, the Examiner has reopened the prosecution of the application and issued a new non-final Office Action. The Examiner has rejected Claims 1-6, 11, 23-24, 26-31, 33 and 37-41 under 35 USC §103 as unpatentable over the Clark et al patent in view of the Gupta et al patent. The Examiner has indicated that Claims 7-10, 12-22, 25, 32 and 34-36 are allowable over the cited art. For the reasons set forth below, Applicants respectfully submit that Claims 1-41 are patentable over the cited prior art.

The Clark patent is directed to a system and method for problem modeling for resource optimization. Clark provides a problem solver system which receives a user solution request including parameters (i.e., characteristics of the problem) and calculates an optimization solution. The Clark system is referred to as a "generic" problem solver because it need not be hard-coded to a particular user data object problem set of parameters. Rather the system includes a problem modeler which transforms data objects from the user resource into optimization metrics (i.e., custom-formatted parameters) which can be used for solving the problem. Therefore, if the data objects change, the system does not have to be hard-coded again, it can simply perform a new transformation of the data objects.

As detailed in Clark at Col. 8, lines 54-61, during configuration or development, the problem modeler examines objects...extracts out relevant information...interprets and transforms it into matrices, objective and cost functions, [etc. which are] stored in solver database 306" for later use by the problem solver in response to a user optimization request. The stored information is in a format which the problem solver needs for providing a solution. When the information is being "transformed", the developer may add input (see: Col. 8, lines 66-67 and Col. 9, lines 7-17), and use defaults (Col. 8, line 64). If the user data objects change, the system updates the stored metrics (Col. 9, lines 54-62).

Applicants respectfully assert that the Clark patent does not teach or suggest the invention as claimed. It is first to be noted that the Clark method for modeling optimization problems is not a method for optimizing information retrieval based on communication relationships. Clark provides no teachings about communication relationships or of relationship information. Further, Clark does not perform information retrieval. Rather, Clark performs optimization calculations. Clark does not optimize information retrieval, it calculates system resource optimizations. Next, Applicants note that the Clark patent does not provide for automatically building and storing a relationship data structure using relationship information. Rather, Clark stores computed metrics. Further, the Clark system does not

automatically modify a user information retrieval query based on a relationship data structure. Rather, Clark transforms the user-input data into metrics which are usable by the problem solver component. The Clark transformation is not based on a relationship data structure but is based on the problem solving metrics which the problem solver component is adapted to apply for problem solving.

Applicants respectfully disagree with the Examiner's interpretation of the Clark patent teachings. On page 3 of the Office Action, the Examiner states that examining a user information resource for database objects and object relationships, transforming the objects into metrics, and storing the metrics is the same as automatically building and storing a relationship data structure. Applicants assert that Clark is storing data, specifically metrics. The metrics are not relationship data and are not stored in a relationship data structure, they are stored as single data items which will be plugged into an optimization formula. Further, Clark makes no mention of the data structure in which the metrics are stored.

Applicants also disagree with the Examiner's statement that Clark automatically modifies an information retrieval query based on a relationship data structure when Clark teaches that information is provided to the information extractor and relationship editor module about what user information to extract for transformation and use in problem solving. First, it must be

noted that since the Clark system provides an interface for an application developer's input, the process is clearly not automatic. Further, information which is being provided to the module is data for use in solving the problem. The data is not the query. While the data is modified, by transformation into metrics, that is not automatically modifying an information retrieval query based on a relationship data structure. As noted above, there is no relationship data and no relationship data structure. Moreover, the Examiner has stated above that the data transformation and storage is "building and storing a relationship data structure"; yet, the Examiner is now saying that identifying the data for transformation is modifying a query based on a relationship data structure. If the information hasn't been identified and provided, how can it be in a data structure which will then be used to modify that same data? Applicants respectfully request reconsideration of the rejection since the same teaching is being applied to two different steps of the claimed invention.

The Examiner next states that Clark does not explicitly indicate integrating relationship information from multiple heterogeneous information sources. Instead the Examiner cites the Gupta patent as providing automated extraction of information from a plurality of semistructured information sources for incorporation into a relational database. Applicants respectfully assert that the Gupta patent teachings do not teach

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the claimed step and that the combination of Clark and Gupta would not obviate the invention as claimed.

The Gupta patent is directed to a system and method of extracting information from multiple web sites for incorporation into a relational database for local searching. Gathering information and placing it in a relational database is not the same as or suggestive of the claimed extracting and integrating of relationship information from multiple heterogeneous information sources. The claimed invention expressly extracts and integrates user-specific relationship information, which is clearly described in the Specification as information related to a user's relationship group (see: page 8, lines 3-12). It is user-specific relationship information, not just any information which can be related to other information in a relational database. Moreover, the automatic building and storing of a relationship data structure is not simply placing gathered information in a relational database. Rather, as shown in Figs. 7A and 7B in the present application, a user-specific relationship data structure is built based on the extracted and integrated relationship information. Applicants have amended the language of the independent claims to highlight the fact that the present invention extracts and integrates user-specific relationship information to build a user-specific relationship data structure which can then be used to modify user queries.

Applicants respectfully assert that the claims are not obviated by the combination of Clark and Gupta.

Applicants note that, even if one were to modify Clark with the Gupta teachings of gathering information into a relational database, the result would not be the present invention. Rather, one would arrive at a Clark system in which information gathered from multiple systems would be transformed into metrics, stored, and then provided to the Clark problem solver. How that gathered information would relate to solving a problem for the specific user system is not clear, however. In fact, it may render the Clark system unworkable to incorporate information gathered from unrelated systems into the metrics for solving a problem for one system. Accordingly, it cannot be obvious to so modify Clark, if the modification would make it unworkable for its intended purpose. Applicants respectfully request reconsideration of the combination of teachings.

Based on the foregoing amendments and remarks, Applicants request entry of the amendments, withdrawal of the rejections, and issuance of the claims.

Respectfully submitted,
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